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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,942	04/26/2001	Jeffery J. Kacines	TI-29248	1191
23494	7590	08/04/2004	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			PHILLIPS, HASSAN A	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,942

Applicant(s)

KACINES, JEFFERY J.

Examiner

Hassan Phillips

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Specification

1. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

2. The disclosure is objected to because of the following informalities: There are minor errors on page 5 of the specification. On page 5, lines 15 and 18, "device" should be referenced with the numeral "11", instead of "10". Appropriate correction is required.

Claim Objections

1. Claim 13 is objected to because of the following informalities: The examiner feels there are minor spelling errors in lines 1 and 6. In line 1, the examiner feels the word "login" should be "logging". In line 6, the examiner feels the word "indicated" should be "indicating". Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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2. Claims 1, 7, and 12, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. In considering claims 1 and 12, it is unclear whether each device is capable of doing the "storing", "delivering", "broadcasting", "receiving", and "traversing", or if there is a specific device designated to do the these tasks. Appropriate correction is required.

4. Claim 7 recites the limitations "the first request" in line 1, and "the second request" in line 2. There is insufficient antecedent basis for these limitations in the claim. In order for the examiner to advance prosecution of the application for patent, the examiner has interpreted "the first request" to be "a first request", and "the second request" to be "a second request".

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1, 4-9, 12-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Satula, U.S. patent 5,675,830, in view of Bonn, U.S. patent 6,618,755.

3. In considering claims 1, 12, 13, Satula teaches a method, and network controller for logging in a device to a network of devices, comprising the steps of:

- a) Storing, in each device, an identification number unique to that device, the identification number having a number of bits, each having a bit position, (col. 2, lines 53-67);
- b) Delivering a control code to each device on the network indicating that a login process is to begin, and broadcasting a pattern of requests to all devices, each request representing a request to each device to acknowledge whether a given bit position of its identification number has a given binary value, (col. 12, lines 1-13);
- c) Receiving acknowledgements from the devices, (col. 12, lines 14-16); and
- d) Determining the identification number of the device, (col. 3, lines 41-44).

Although the disclosed method of Satula shows substantial features of the claimed invention, it fails to expressly disclose:

- e) Traversing a binary tree in response to the acknowledgements.

Nevertheless, in a similar field of endeavor, Bonn teaches a method for automatically identifying sub networks in a network comprising:

- e) Traversal of a tree consisting of a list of identified host addresses, (col. 2, lines 10-19).

Thus, given the teachings of Bonn it would have been apparent to one of ordinary skill in the art to modify the teachings of Satula to show traversing a binary tree in response to the acknowledgements. This would have shown an efficient means for determining an available identification number for a device that was in need of an identification number, Bonn, col. 1, lines 38-41.

4. In considering claim 4, Satula teaches the network being a network of computers. See col. 2, lines 38-52.

5. In considering claim 5, Satula teaches the method being performed by a hardware logic device. See col. 2, lines 38-52.

6. In considering claim 6, Satula teaches the method being performed by a processor-based device. See col. 2, lines 38-52.

7. In considering claim 7, the teachings of Satula provide a means for a first request to acknowledge a one rather than a zero, and a second request to acknowledge a zero rather than a one. See col. 12, lines 65-67, and col. 13, lines 1-3.

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8. In considering claim 8, it is implicit in the teachings of Satula that the acknowledgement is a signal above a noise threshold. See col. 12, lines 14-16.

9. In considering claim 9, Satula teaches maintaining a tracking register associated with each device to track acknowledgements. See col. 12, lines 14-16.

10. In considering claim 14, Satula teaches the processing circuitry being a programmable logic device. See col. 2, lines 38-52.

11. In considering claim 15, Satula teaches the processing circuitry being a processor and program memory. See col. 2, lines 38-52.

12. In considering claim 16, Satula teaches the network being a local area network of computers, and the controller being part of a network server. See col. 2, lines 38-52.

13. Claims 2, 3, 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Satula, in view of Siep et al. (hereinafter Siep), U.S. patent 6,452,480.

14. In considering claim 2, although the disclosed method of Satula shows substantial features of the claimed invention, it fails to explicitly disclose:

e) A wireless network.

Nevertheless, wireless networks were well known in the art at the time of the invention. This is exemplified by Siep in a method that teaches an active wireless network for calculators that comprises:

- e) Broadcasting information over a wireless network, (col. 1, lines 39-48).

Thus, given the teachings of Siep it would have been apparent to one of ordinary skill in the art to modify the teachings of Satula to show the network being a wireless network, and performing the broadcasting and receiving with wireless signals. This would have broadened the teachings of Satula by allowing wireless communication amongst the devices taught by Satula. This also would have made the teachings of Satula more robust, and therefore attractive to a larger audience, Siep, col. 1, lines 49-56.

15. In considering claim 3, Siep teaches the network being a network of calculators. See col. 1, lines 6-8. One of ordinary skill in the art would combine the teachings of Satula with Siep, for the reasons given in consideration of claim 2.

16. In considering claim 17, although the disclosed method of Satula shows substantial features of the claimed invention, it fails to explicitly disclose:

- f) A network of calculators.

Nevertheless, Siep teaches an active wireless network comprising:

- f) A network of calculators, (col. 1, lines 6-8).

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Thus, given the teachings of Siep it would have been apparent to one of ordinary skill in the art to modify the teachings of Satula to show the network being a network of calculators, and the controller being a hardware communications controller. This would have broadened the teachings of Satula by allowing calculators to be the devices taught by Satula. This also would have made the teachings of Satula more robust, and therefore attractive to a larger audience, Siep, col. 1, lines 49-56.

17. Claim 10, is rejected under 35 U.S.C. 103(a) as being unpatentable over Satula, in view of Alkhatib et al. (hereinafter Alkhatib), U.S. patent 6,532,217.

18. In considering claim 10, although the disclosed method of Satula shows substantial features of the claimed invention, it fails to explicitly disclose:

- g) Ceasing to send acknowledgements after it cannot acknowledgement with respect to a bit position.

Nevertheless, in a similar field of endeavor, Alkhatib teaches a system for automatically determining a network address comprising:

- g) Devices that fail to send acknowledgements if it cannot acknowledgement with respect to a bit position, (col. 9, lines 24-38).

Thus, given the teachings of Alkhatib it would have been apparent to one of ordinary skill in the art to modify the teachings of Satula to show each device ceasing to send acknowledgements for subsequent bit positions after it cannot acknowledgement with respect to any bit position. This would have provided a fail-safe means for

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determining a unique address/identifier for a device new to the network, Alkhatib, col. 3, lines 20-50.

19. Claim 11, is rejected under 35 U.S.C. 103(a) as being unpatentable over Satula, in view of Beser et al. (hereinafter Beser), U.S. patent 6,754,622.

20. In considering claim 11, although the disclosed method of Satula shows substantial features of the claimed invention, it fails to explicitly disclose:

- h) Ending the login process if two successive requests for values of the same bit position are not acknowledged.

Nevertheless, in a similar field of endeavor, Beser teaches a method for maintaining a network address table comprising:

- h) Ending a search to determine whether a device is active, and deleting the corresponding devices address from a table if a second reply is not received within a predetermined amount of time, (col. 3, lines 1-8).

Thus, given the teachings of Beser it would have been apparent to one of ordinary skill in the art to modify the teachings of Satula to show ending the login process if two successive requests for values of the same bit position were not acknowledged. Doing so would ensure that a device new to the network would receive a unique address/identifier, by double checking to make sure the address/identifier is not being used by another device already on the network, Beser, col. 3, lines 18-23.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Satula, U.S. Patent 5,675,830 discloses an addressing scheme for remote devices.

Bonn, U.S. Patent 6,618,755 discloses binary tree traversal in automatically identifying sub networks in a network.

Siep et al., U.S. Patent 6,452,480 discloses an active wireless network for calculators.

Alkhatib et al., U.S. Patent 6,532,217 discloses a system for automatically determining a network address.


Beser et al., U.S. Patent 6,754,622 discloses a method for maintaining a network address table.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (703) 305-8760. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (703) 308-6687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ZARNI MAUNG
PRIMARY EXAMINER